

903 Pad Remedial Alternatives

Policy Perspective

The Rocky Flats Cleanup Agreement mandates that when contaminant levels in soils exceed Tier I action levels, a process to identify, evaluate and implement efficient, cost-effective, and feasible remediation or management action will be triggered. Appropriate remedial or management actions will be determined through this process on a case-by-case basis, and may include removal, treatment, disposal, or in-place stabilization of contaminated soils.

Actions will consider the following:

- Actions will be developed in an integrated manner with other actions being taken;
- Actions will be consistent with best management practices;
- Actions may be accomplished by means of an interim or final action; and
- Remediation and/or management actions will be implemented to protect ecological resources where those actions can be implemented without damaging other ecological resources.

Technical Summary

The CERCLA feasibility study process includes a development of remedial alternatives task which requires (1) identifying remedial action objects (i.e. protection of human health and the environment); (2) identifying potential treatment, resource recovery, and containment technologies that will satisfy remedial action objects; (3) screening the technologies based on their technical implementability; and (4) assembling technologies and their associated containment or disposal requirements into alternatives. It should be noted that CERCLA requires the evaluation of a No Action/No Further Action alternative.

A partial list of potential technologies for remediation of the 903 Pad Project area are provided below:

- **Removal and Offsite Disposal**– Excavation of contaminated surface and subsurface soils using such equipment as scrapers, bulldozers, front-end loaders, off road haul trucks, and water trucks for dust suppression. Waste would be disposed at appropriate licensed waste disposal facility.
- **Stabilization** – Consists of those actions that would immobilize contaminants using chemical, thermal, physical, or biological technologies. Process options involve the addition of a chemical additive or binder to contaminated soils, with or without mixing, reducing mobility of contaminant. Stabilization may also be achieved through enhancing vegetation in contamination area.
- **Caps/Covers** – Consists of capping options that would minimize or prevent migration of contaminants by wind dispersion or storm water erosion mechanisms for surface soil, and by infiltration and Vadose zone transport mechanisms for subsurface soils. Capping options include constructing a vegetative or multi-layer cover over contaminated soils.
- **Deep Tilling** – Option includes ripping, plowing, and/or tilling impacted soils to reduce plutonium concentrations. Approximately 120 acres of Jefferson County land (OU3 IHSS 119) east of Rocky Flats has been tilled. The City of Westminster acquired the land in February 1995.
- **Engineered Barriers** – Options used to prevent or control migration of contaminants via wind dispersion and storm water erosion. Types of engineered barriers include diversion ditches (i.e. modifications to South Interceptor Ditch) and settlement basins (i.e. Woman Creek Reservoir, regarding of surface topography (i.e. terracing).

Point of Contact

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